

**THE FOLLOWING ARE THE ENGLISH TRANSLATION
OF ANNEXES TO THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT (ARTICLE 34):**

Amended Sheets (Pages 24-25/3)

What is claimed is:

1. A plasma processing apparatus for performing a process on a substrate (11) by exposing the substrate to a plasma generation region (22), the apparatus comprising:
 - 5 a chamber (1) for accommodating therein the substrate (11);
 - a top plate unit (4) serving as a part of partition walls of the chamber (1); and
 - 10 an antenna unit (3) for supplying a high frequency electromagnetic field into the chamber (1) to form the plasma generation region (22) in a region between the top plate unit (4) and the substrate (11) accommodated in the chamber (1),
 - 15 wherein the top plate unit (4) includes:
 - a flat plate portion (4a) disposed to face the substrate (11) and being in contact with the antenna unit (3); and
 - a side wall portion (4b) formed to extend from a peripheral region of the flat plate portion (4a)
20 towards a side where the substrate (11) is disposed.
2. The plasma processing apparatus of claim 1, wherein the side wall portion (4b) has a thickness of $\lambda_g/4$ or
25 greater, λ_g being a wavelength of a high frequency electromagnetic field based on a dielectric constant of the

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top plate unit (4).

3. The plasma processing apparatus of claim 2, wherein the side wall portion (4b) has a thickness smaller than λ_g .

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4. The plasma processing apparatus of claim 1, wherein sides of the flat plate portion (4a) and the side wall portion (4b) facing the plasma generation region (22) have a smooth and curved surface extending between the flat plate
10 portion (4a) and the side wall portion (4b).

5. The plasma processing apparatus of claim 1, comprising a gas injection opening (13) for supplying a gas into the chamber (1), wherein the gas injection opening (13) is
15 disposed to inject the gas along the side wall portion (4b).

6. The plasma processing apparatus of claim 1, wherein the chamber (1) includes a conductive portion (1) being in contact with an outer periphery of the side wall portion
20 (4b).